April 2008

Army Industrial Hygiene News and Regulatory Summary

This information is published by the Industrial Hygiene and Medical Safety Management (IHMSM) for the U.S. Army Center for Health Promotion and Preventive Medicine as a service to the Army Industrial Hygiene Program, Federal agencies, and industrial hygienist throughout the Federal and private sector

Table of Contents

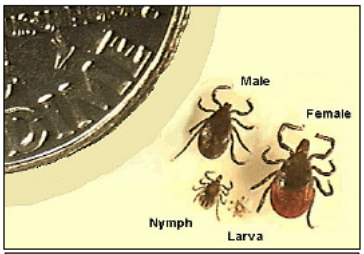
USACHPPM
5158 Blackhawk Road
Aberdeen Proving Grounds, MD 21010-5403

Phone: (410)436-2439
Fax: (410)436-8795
E-mail: ihnews@amedd.army.mil

We're on the Web!
http://CHPPM-www.apgea.army.mil/ihmsm

POC:
Sandra P. Monk, CIH
Program Manager
IHMSM

TOPIC OF THE MONTH



Ixodes scapularis (blacklegged tick, a.k.a. 'deer tick') is responsible for transmitting Lyme disease in the United States.

May is Lyme Disease Awareness Month. Lyme disease is transmitted to humans and animals by infected ticks. One sign of infection is a flat, bull's-eye rash. Symptoms can spread to the joints, nervous system and heart. Lyme disease can be severely debilitating but is rarely fatal. To prevent Lyme disease, avoid areas where ticks are found. Wear a long-sleeved shirt, long pants, and high socks. Use permethrin on your clothing and DEET on your skin. Check your body for ticks and use tweezers to remove ticks promptly.

USACHPPM provides a detailed Fact Sheet on Lyme Disease.

http://chppm-www.apgea.army.mil/documents/FACT/18-011-0406-LymeDiseaseJTF-April2006.pdf

DoD INDUSTRIAL HYGIENE WORKING GROUP

DoD IH Forum

The Ninth Annual DoD Industrial Hygiene Forum will be held at the AIHA Conference and Expo in Minneapolis, Minnesota, on Tuesday, 3 June 2008, 1330-1730. For more information and registration please go to: http://www.dodforums.org/IH2008/

DoD ERGONOMIC WORKING GROUP

The 78th issue of "DoD Ergonomics Working Group News" features the U.S. Navy Fleet Readiness Center (FRC) East in Cherry Point, North Carolina participation in the 2008 Ergo Cup® Competition, highlighting their innovative workplace solution—the electrical adjustable sawhorse.
http://www.ergoworkinggroup.org

KEY INDUSTRIAL HYGIENE TOPICS

Confined Space

Confined Space Safety Resources

OSHA: http://www.osha.gov

Permit-Required Confined Spaces, Final Rule; OSHA, 29 CFR Part 1910.146;
Federal Register, 63:66018-66036 (1998, December 1)

ASSE: http://www.asse.org/cartpage.php?link=z117.1-2003

NIOSH: http://www.cdc.gov/niosh/topics/confinedspace and http://www.cdc.gov/niosh/86110v2.html

A Guide to Safety in Confined Spaces, (NIOSH Publication Number 87-113),

July 1987 Working in Confined Spaces, (NIOSH Publication Number 80-106), December 1979

ANSI: http://www.ansi.org

Safety Requirements for Confined Spaces, American National Standards Institute,
Z117.1-1989, 1995 revision

Ergonomics

Backpack Straps Can Decrease Blood Flow, Increase Fatigue

More than 92 percent of the children in the U.S. carry backpacks. Typically the backpacks are loaded with almost one-fourth of the child's body weight (22 percent) and worn with only one strap. The straps can significantly increase pressure when the load is ten percent or more. Strap pressures with loads as small as ten percent of bodyweight can obstruct localized blood flow and contribute to shoulder fatigue.

In some professions, adults in the military, firefighting and mountain rescue, carry packs that may equal as much as 60 percent of adult body weight. Even light loads of 26 pounds can decrease upper extremity blood flow, and may result in a loss of fine motor control and increased fatigue.

Backpack straps typically rest on an area of the body where they may compress the axillary vein which causes abnormally high blood pressure inside the veins and a subsequent decrease of blood flow in the shoulders and arms. Blood flow of the large and small vessels of the upper extremity area would decrease in an individual while wearing a backpack.

Backpack loads of just 26 pounds decrease upper extremity macrovascular and microvascular blood flows, and may result in a loss of fine motor control and increased fatigue. The mechanism of diminished blood flow is likely due to strap compression of the axillary vein. Backpack straps may benefit from a redesign that skirts the vein leading from the upper extremity to the heart.

Source: http://www.ohsonline.com/articles/60557

AIHA to Host Ergonomics Symposium

The American Industrial Hygiene Association (AIHA) Ergonomics Committee will sponsor the "Ergonomics Symposium: Making a Business Case for Ergonomics (and Other Safety and Health Programs) on June 1, 2008, at the American Industrial Hygiene Conference and Exposition (AIHce) in Minneapolis, MN. This symposium will demonstrate the development of the business case of ergonomics using economic criteria. More information on the Symposium can be found at http://www.aiha.org/aihce08/education/symposium.htm or by contacting Samantha Seigmam at sseigman@aiha.org .

Back Belts Not Particularly Useful

Lumbar or lower back supports--those large belts that people wear around their waists when they lift or carry heavy objects--are not effective for preventing low back pain, Although many people use lumbar supports to bolster the back muscles, they are no more effective than lifting education--or no treatment whatsoever--in preventing related pain or reducing disability in those who suffer from the condition.

The general population and workers should not wear lumbar supports to prevent low back pain or for the management of low back pain. In 15 studies--seven prevention and eight treatment studies--that included more than 15,000 people, Researchers found little or no difference between people who used supports and their peers who did not when measuring pain prevention or reduction in number of sick days used.

Lumbar supports are useful only as an additional treatment to exercise and other interventions. Bracing may make it more comfortable for some people to move around.

Source: http://www.ohsonline.com/articles/61335

KEY INDUSTRIAL HYGIENE TOPICS (con't)

Hazardous Chemicals

Beryllium

Comments Invited for Draft NIOSH Alert on Preventing Chronic Beryllium Disease

NIOSH is conducting public review of a draft NIOSH document, NIOSH Alert: Preventing Chronic Beryllium Disease and Beryllium Sensitization. The Alert describes the nature of chronic beryllium disease and other health effects that can occur from exposure to beryllium and beryllium-containing materials. Recommendations for companies and workers to minimize the health risk to workers are also provided. When submitting comments to the NIOSH Docket, be sure to reference Docket Number 120. Guidelines for submissions can be found at http://www.cdc.gov/niosh/review/public/120.

Combustible Dust

OSHA Instruction on Combustible Dust National Emphasis Program

CPL-03-00-08 was reissued on 11 March 2008. This instruction contains policies and procedures for inspecting workplaces that create or handles combustible dusts. In some circumstances these dusts may cause a deflagrations, other fires or an explosion. These dusts include, but are not limited to:

- Metal dust such as aluminum and magnesium
- Wood dust
- Coal and other carbon dusts
- Plastic dust and additives
- Biosolids
- Other organic dust such as sugar, flour, paper, soap and dried blood
- Certain textile materials

Source: http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=DIRECTIVES&p_id=3830

Illness/Injury

A Study Quantifying the Hand-to-Face Contact Rate and Its Potential Application to Predicting Respiratory Tract Infection

A substantial portion of human respiratory tract infection is thought to be transmitted via contaminated hand contact with the mouth, eyes, and/or nostrils. Thus, a key risk factor for infection transmission should be the rate of hand contact with these areas termed target facial membranes. A study was conducted in which 10 subjects were each videotaped for 3 hr while performing office-type work in isolation from other persons. The number of contacts to the eyes, nostrils, and lips was scored during subsequent viewing of the tapes. The total contacts per subject had sample mean $x = 47$ and sample standard deviation $s = 34$. The average total

contact rate per hour was 15.7. The authors developed a relatively simple algebraic model for estimating the dose of pathogens transferred to target facial membranes during a defined exposure period. The model considers the rate of pathogen transfer to the hands via contact with contaminated environmental surfaces, and the rate of pathogen loss from the hands due to pathogen die-off and transfer from the hands to environmental surfaces and to target facial membranes during touching. The estimation of infection risk due to this dose also is discussed. A hypothetical but plausible example involving influenza A virus transmission is presented to illustrate the model.

Source: Journal of Occupational and Environmental Hygiene, Volume 5, Issue 6 June 2008, pages 347 - 352 (Available with subscription or AIHA membership)

Study Bolsters Link between Pesticides, Parkinson's Disease

For the first time, the association between Parkinson's disease and exposure to pesticides has been shown in patients with the neurological disorder compared with their unaffected relatives; Parkinson's disease is a common neurological disorder affecting about 1 million people in the United States. The disorder typically develops in later life resulting in symptoms such as tremors and muscle rigidity.

Although variations in several genes have been identified that contribute to the disease, these rare genetic defects account for a small proportion of the overall prevalence of the disorder.

The majority of Parkinson's disease cases are thought to be due to an interaction between genetic and environmental factors.

"Previous studies have shown that individuals with Parkinson's disease are over twice as likely to report being exposed to pesticides as unaffected individuals" said the study's lead author, Dana Hancock, "but few studies have looked at this association in people from the same family or have assessed associations between specific classes of pesticides and Parkinson's disease."

The study of related individuals who share environmental and genetic backgrounds that might contribute to Parkinson's disease enables researchers to identify specific differences in exposures between individuals with and without the disease. The research team from Duke University Medical Center (Durham, NC) and the University Of Miami Miller School Of Medicine Morris K. Udall Parkinson Disease Research Center of Excellence (Miami, FL, USA) recruited 319 patients and over 200 relatives. They used telephone interviews to obtain histories of pesticide exposure, living or working on a farm, and well-water drinking.

The authors detected an association between pesticide use and Parkinson's disease. Among these, the strongest were between the disorder and use of herbicides and insecticides, such as organochlorides and organophosphates. No association was found between Parkinson's disease and well-water drinking or living or working on farms, which are two commonly used proxies for pesticide exposures.

Many studies have supported pesticides as a risk factor for PD, but "biological evidence is presently insufficient to conclude that pesticide exposure causes PD," said Hancock. "Further investigation of these specific pesticides and others may lead to identification of pertinent biological pathways influencing PD development."

In addition future genetic studies of Parkinson's disease should consider the influence of pesticides, since exposure to pesticides may provide a trigger for the disease in genetically predisposed individuals.

Source: Occupational Health and Safety, March 31, 2008

http://www.ohsonline.com/articles/60324/

Nanotechnology

NIOSH Posts Updated Nanotechnology Strategic Plan for Public Comment

NIOSH placed on its website an updated version of its Strategic Plan for NIOSH Nanotechnology Research: Filling the Knowledge Gaps. The update reflects scientific developments in research since 2005, when the initial version was released, and captures the ongoing prioritization needed to keep pace with rapid advances being made in nanotechnology. The document provides an accounting of current projects and carries NIOSH's research planning forward to 2012. The plan has four goals for research: 1) to determine if nanoparticles and nanomaterials pose risks for work-related injuries and illnesses, 2) to prevent work-related injuries through the application of new nanotechnology products, 3) to promote healthy workplaces through interventions, recommendations, and capacity-building, and 4) to enhance global workplace safety and health through national and international collaborations on nanotechnology research and guidance. The strategic plan will be peer-reviewed by the NIOSH Board of Scientific Counselors. The plan is available at http://www.cdc.gov/niosh/topics/nanotech/strat_plan.html.

NIOSH Research Referenced in Scientific American on Health Implications of Nanotechnology

An on-line article from Scientific American reports on the challenges and complexities of research by NIOSH and others to determine if nanotechnology poses serious human health risks, and to define effective occupational control measures in the face of uncertainties. The article describes the complex issues that are the focus of NIOSH's national leadership in research, and highlights NIOSH's contributions to defining and answering the questions about potential occupational health effects of nanomaterials. The article is online at http://www.sciam.com/article.cfm?id=will-nano-particles-present-big-health-problems

KEY INDUSTRIAL HYGIENE TOPICS (con't)

Odor-Eating Silver Nanoparticles Raise Concern

Nanotechnology is now everywhere, including, quite possibly, on your feet. Valued for its antibacterial and odor-fighting properties, nanoparticle silver is becoming the star attraction in a range of products from socks to bandages to washing machines. But is it also getting into the water supply and posing unknown risks?

Researchers bought six pairs of name brand anti-odor socks impregnated with nanosilver and then soaked them in a jar of room-temperature distilled water and shook the contents for an hour. They then tested the water for two types of silver--the harmful "ionic" form and the less-studied nanoparticle variety. Ordinary laundering can wash off substantial amounts of the nanosilver particles from socks impregnated with the material. The researchers suggest that the particles, intended to prevent foot odor, could travel through a wastewater treatment system and enter natural waterways where they might have unwanted effects on aquatic organisms living in the water and possibly humans, too.

Different socks released silver at different rates, suggesting that there may be a manufacturing process that will keep the silver in the socks better. Some of the sock materials released all of the silver in the first few washings, others gradually released it. Some didn't release any silver. If sufficient nanosilver leeches out of these socks and escapes wastewater treatment systems into nearby lakes, rivers, and streams, it could damage aquatic ecosystems. Ionic silver, the dissolved form of the element, does not just attack odor-causing bacteria. It can also hijack chemical processes essential for life in other microbes and aquatic animals.

Source: http://pubs.acs.org/cen/news/86/i15/8615news1.html

Noise

CHPPM Publication-Suggested Procedures for Handling and Recording Noise Complaints at Military Installations

A new publication describing how to respond to noise complaints may be found at: http://chppm-www.apgea.army.mil/documents/FACT/TG20044Jan08-1.pdf

Personal Protective Equipment

Human Subject Testing of Leakage in a Loose-Fitting PAPR

Leakage from loose-fitting PAPRs (powered air-purifying respirators) can compromise the safety of wearers. The Martindale Centurion MAX multifunction PAPR is a loose-fitting PAPR that also incorporates head, eye, and ear protection. This respirator is used in mines where coal dust usually is controlled by ventilation systems. Should the respirator be depended on for significant respiratory protection? Ten human volunteers were asked to wear the Centurion MAX inside a fog-filled chamber. Their inhalation flow rates were measured with small pitot-tube flowmeters held inside their mouths. They were video imaged while they

breathed deeply, and the points at which the fog reached their mouths were determined. Results showed that an average of 1.1 L could be inhaled before contaminated air reached the mouth. As long as the blower purges contamination from inside the face piece during exhalation, the 1.1 L acts as a buffer against contaminants leaked due to overbreathing of blower flow rate.

Source: Journal of Occupational and Environmental Hygiene, Volume 5, Issue 5 May 2008, pages 325 - 329 (Available with subscription or AIHA membership)

Influenza Pandemic and the Protection of Healthcare Workers with Personal Protective Equipment

Personal protective technology includes devices such as respirators, chemical-resistant clothing, hearing protectors, and safety goggles and glasses that provide a barrier between the worker and an occupational safety or health risk.

NIOSH and the Institute of Medicine (IOM) have a standing committee to provide strategic guidance in addressing Personal Protective Equipment (PPE) issues for workers. Including PPE for healthcare workers in the event of pandemic influenza.

The committee determined that there is an urgent need to address the lack of preparedness regarding effective PPE for use in an influenza pandemic. In September 2007, three critical areas were identified that require expeditious research and policy action:

1. Influenza transmission research should become an immediate and short-term research priority so that effective prevention and control strategies can be developed and refined.
Employer and employee commitment to worker safety and appropriate use of PPE should be strengthened.

2. An integrated effort is needed to understand the PPE requirements of the worker and to develop and utilize innovative materials and technologies to create the next generation of PPE capable of meeting these needs.

3. Controlling the spread of a potential influenza pandemic is of critical importance to the more than 14 million healthcare workers in the United States (approximately 10 percent of the U.S. workforce) and their patients. Given that health care workers will be on the front lines during an influenza pandemic, protecting them with the best available prevention methods and PPE is imperative to reducing illness and death and preventing the progression of a pandemic.

One step NIOSH is taking to address the IOM recommendations is the development of an action plan, which outlines current and future activities that should be considered for both near and long term implementation.

KEY INDUSTRIAL HYGIENE TOPICS (con't)

There are many complexities involved in protecting healthcare workers with PPE such as ensuring that workers appreciate the differences between medical masks and respirators. Medical masks are loose-fitting coverings of the nose and mouth designed to protect the patient from the cough or exhaled secretions of the physician, nurse, or other healthcare worker. Medical masks are not designed or certified to protect the wearer from exposure to airborne hazards. They may offer some limited, as yet largely undefined, protection as a barrier to splashes and large droplets. However, because of the loose-fitting design of medical masks and their lack of protective engineering, medical masks are not considered personal protective equipment.

Protection of the healthcare worker against infectious disease can also involve gloves, eye protection, face shields, gowns, and other protection. For the most part, these products are designed to provide a barrier to microbial transfer with particular attention to protecting the wearer's mucous membranes. Yet, they present the healthcare worker with other challenges that include difficulties in verbal communications and interaction with patients and family members, decreased tactile sensitivity through gloves, and physiological burdens such as difficulties in breathing while wearing a respirator. The extent of liquid penetration is a major issue with gowns and gloves. Comfort and wearability issues include the breathability of the fabric or material and biocompatibility or sensitivity to avoid contact dermatitis and other skin irritations.

Questions remain about the reusability of PPE as well as how long viruses survive on contaminated surfaces and what substances provide a protective barrier against viruses. Issues surrounding how best to integrate the various types of protective equipment (e.g., the respirator and eye protection) also need to be explored.

Additional questions addressed in the action plan include:

- What are the major modes of influenza transmission?
- What are the relevant sizes of aerosols?
- What is the infectivity of aerosols?
- Is high humidity an issue with wearing respirators?
- How does air flow exchange and ventilation affect transmission?
- What is the effectiveness of medical masks?
- What is the role of fomites (any object or substance capable of absorbing infectious organisms)?
- Should PPE other than respirators be certified? If so, who would be responsible for certification?

Comments to the draft action plan would be appreciated before June 1, 2008. NIOSH would also appreciate comments on our approach to addressing the IOM recommendations. The complete IOM report and the draft action plan can be viewed on the NIOSH website.

http://www.cdc.gov/niosh/blog/

KEY INDUSTRIAL HYGIENE TOPICS (con't)

Super Bugs and Other Emerging Hazards-NFPA 1999's 2008 Edition

The latest version of NFPA 1999 has just been published and includes revisions, addition of more requirements, and more PPE items.

The 2008 edition still has all of the requirements of the old version and now includes the addition of reusable PPE performance and certification requirements. The reusable PPE must pass more stringent physical testing than the disposable, single-use items, such as multiple washing in addition to the viral penetration resistance and physical properties. Footwear performance has also been added, as have respirator requirements and helmets. The 2008 edition references 37 ASTM test methods for performance requirements, two European tests, four American Association of Textile Chemists and Colorists tests, and three ANSI tests.

The new version of the standard also addresses PPE for first responders and first receivers from exposure to CBRN agents. This Chemical, Biological, Radiological, and Nuclear protection is included to equip the firefighters and emergency medical personnel who are first responders in the event of a terrorist attack.

The new edition also covers protection from new hazards that include H5N1 and MRSA.

MRSA: The U.S. Centers for Disease Control and Prevention estimates MRSA, a mutated form of the common bacteria, staph, will cause more deaths than AIDS this year. MRSA, Methicillin Resistant Staphylococcus Aureus, has emerged after decades of prescribing penicillin-based antibiotics.

Clusters of cases of MRSA outbreaks have been reported in athletes, military recruits, children, and certain ethnic groups. Law enforcement personnel who deal with homeless people, illegal immigrants, and prison inmates are at risk of acquiring MRSA.

MRSA infections are commonly mistaken for spider bites, boils, or pimples. They spread and can be disfiguring and require surgery, or even amputation, to stop. Systemic involvement can result in death. MRSA can penetrate through a scrape, pimple, or sore. Most MRSA is spread on hands to different surfaces.

Proper hand washing is the most important step in preventing transmission and infection by MRSA. You should never share personal items such as towels and razors or touch anyone's bandages or wounds. Towels and gym clothes should be washed in hot water and dried in hot dryers, not air-dried. Surfaces should be wiped down with alcohol-based disinfectants that are known to kill MRSA. Hand sanitizers that are alcohol based and proven to kill MRSA should be used to prevent transmission and infection.

Some antibiotics such as Vancomycin are effective for treating MRSA, but common penicillin-based antibiotics are not effective. You should contact your doctor if you suspect you have MRSA as soon as possible. Earlier diagnosis is the key to successful treatment.

KEY INDUSTRIAL HYGIENE TOPICS (con't)

A disposable glove will protect the wearer from exposure of the hands to MRSA bacteria. However, MRSA can contaminate the outer surface of any glove and be transmitted to other surfaces. The wearer can wipe the glove surface with hand sanitizers that kill MRSA to prevent transmission of MRSA on the surface of the glove. You must be certain you are using a hand sanitizer that has been proven to kill MRSA and that the sanitizer is not degrading the glove that is worn so that the barrier efficacy is compromised. Also, gloves provide protection from bloodborne pathogens and are an integral part of a protection ensemble for contact with MRSA, whether treating patients or cleaning up facilities, but they should not be the sole item of PPE chosen for such virulent pathogens.

http://www.ohsonline.com/articles/60553

Radiation

NIOSH Database for Assessing Exposure to Power-Frequency Magnetic Fields

A new job-exposure matrix assessing exposures to magnetic fields from electric power has just been posted to the NIOSH Web site. NIOSH collaborated with researchers from the University of Washington to study disease risks from occupational magnetic fields exposures, which have been identified as a possible human carcinogen by the National Institute of Environmental Health Sciences and the California Department of Public Health. The result of the research was a job-exposure matrix that links exposure statistics with disease and death certificates. The matrix, which has already been used in three epidemiologic studies, can be obtained as MS Excel® files at http://www.cdc.gov/niosh/topics/emf/jem-powerfreq/jempowerfreq.html . For more information, contact Dr. Joseph Bowman at JBowman@cdc.gov.

PREVENTIVE MEDICINE ISSUES

Tips for Implementing an Automatic External Defibrillator Program

Despite the fact that Automatic external defibrillators (AEDs) are becoming more commonplace, misconceptions about them abound, particularly in the workplace. For instance, many individuals who have conducted training on AEDs find that employees are afraid of trying them out, as they believe they are too complicated to use. In addition, many employers are under the impression that just having an AED in the facility will be enough to take care of an emergency situation, not realizing that without proper training and awareness, this could create more of a liability than a solution. Here are 10 tips for implementing a successful AED Program:

1. Identify a program leader: This should include, at minimum, a medical director, a program director and/or a representative of the local EMS system.

2. Review laws, regulations and advisories addressing AED programs.

3. Determine program costs and develop a budget: Onsite AED programs costs can include training, costs for AEDs, insurance, batteries and electrodes, among other things.

4. Secure Program Funding: This can come from an organization's operational budget as well as outside funding sources such as local corporations, civic organizations and government grants.

5. Select AED brand and model and determine the number of AEDs needed: When determining the number of AEDs to buy, consider this: AEDs should be placed in locations that can be reached within 90 seconds by potential responders walking at a fast pace.

6. Recruit and train likely responders: Potential responders should undergo training to become familiar with the specific device that will be used in the on-site program, and to ensure they know how to provide CPR.

7. Develop a plan for emergency communications: This should ensure that on-site responders are summoned immediately and that 9-1-1 or the local emergency number is called immediately.

8. Develop, practice and follow a written response plan: This should include a number of things, such as coordination with EMS system and training AED users.

9. Cultivate awareness about the program: All employees should be informed about a company's AED program via newsletters, e-mail, staff meetings, signs and posters.

10. Institute measurements for continuous quality improvement: Reevaluate the response plan for effectiveness and revise as necessary.

Source: Sudden Cardiac Arrest Foundation, http://www.sca-aware.org/

CDC Report Calls for New Foodborne Illness Strategies

A 10-state report released April 10 by the Centers for Disease Control and Prevention showed little change in the incidence of some foodborne infections after a period of decline. The findings are from 2007 data reported to CDC as part of the agency's Foodborne Diseases Active Surveillance Network, FoodNet.

FoodNet monitors foodborne disease and conducts related epidemiologic studies to help health officials better understand the epidemiology of foodborne diseases in the United States. Although the FoodNet population is similar to the U.S. population, CDC says the findings are used to detect trends in foodborne illness and should not be generalized for the entire U.S. population.

PREVENTIVE MEDICINE ISSUES (con't)

Campylobacter, Listeria, Salmonella, Shigella, E.coli O157, Vibrio, and Yersinia did not decline significantly, and the estimated incidence of Cryptosporidium increased when compared with the previous three years (2004-2006). Although there have been significant declines in the incidence of some foodborne infections since surveillance began in 1996, these declines all occurred before 2004.

CDC recommends that consumers reduce their risk for foodborne illness by following safe food-handling recommendations and by avoiding the consumption of unpasteurized milk, raw or undercooked oysters, raw or undercooked eggs, raw or undercooked ground beef, and undercooked poultry. The risk for foodborne illness can also be decreased by choosing in-shell pasteurized eggs, irradiated ground meat, and high pressure-treated oysters.

The full report, "Preliminary FoodNet Data on the Incidence of Infection with Pathogens Transmitted Commonly Through Food – 10 States, United States, 2007" appears in the April 11, 2008 edition of *Morbidity and Mortality Weekly Report* and is available online at www.cdc.gov/mmwr. To learn more about FoodNet, visit www.cdc.gov/foodnet. To learn more about foodborne infections, visit www.cdc.gov/ncidod/dbmd/diseaseinfo/foodborneinfections_g.htm.

INDUSTRIAL HYGIENE PROFESSIONAL NEWS

AIHA

Be Part of the AAB or TAP

AIHA is seeking qualified volunteers to fill soon-to-be-open positions on the LQAP Analytical Accreditation Board and the Technical Advisory Panel.

The AAB oversees the governance and processes related to LQAP. TAP members advise the AAB on technical laboratory matters and review 15 percent of all accreditation applications that AIHA receives for the asbestos analysts' registry and accreditation programs (industrial hygiene, environmental lead, and environmental microbiology).

Applications, which must be completed and submitted to AIHA by June 30, and other information about both AAB and TAP qualifications and duties can be found on the in the LQAP section of the AIHA web site under "Documents, Policies, Fees."

For more information, contact Margie Breida, LQAP Operations Manager at mbreida@aiha.org.

INDUSTRIAL HYGIENE PROFESSIONAL NEWS (con't)

ACGIH

Annual Reports of the Committees on TLVs® and BEIs® for Year 2007
(Now Available! FREE to Members!)

- Aerosol Sampler Calibration
- Control Banding: Issues and Opportunities
- Nanoparticles and Ultrafine Aerosol Measurements
- Sampling for Chemical, Biological, Radiological, Nuclear, and Explosive Agents during Emergency Response to Mass Destructive Attacks, Terrorism, and Chemical Disasters

OSHA

OSHA Revises VPP Policies & Procedures Manual

Approval into the federal Voluntary Protection Programs is OSHA's official recognition of the outstanding efforts of employers and employees who have created exemplary worksite safety and health management systems. Now OSHA has issued an Instruction, CSP 03-01-003, which revises and clarifies the overall framework of policy and procedures for administering VPP. Major changes to the policies and procedures manual include:

- **Benchmark Rates**. This Instruction incorporates changes published in Federal Register Notice 68 FR 68475, December 8, 2003, that revised the benchmark injury and illness rates used within VPP.
- **Process Safety Management.** This Instruction modifies procedures for VPP applications, OSHA onsite evaluations, and annual participant self-evaluations for applicants/participants subject to OSHA's Process Safety Management (PSM) standard.
- **Compressed Reapproval Process**. This Instruction introduces an alternative onsite reapproval process for Star participants who have demonstrated sustained excellence in safety and health systems management.
- **Other**. This Instruction removes template letters that OSHA periodically modifies and that are more appropriately disseminated through other means. It includes changes in the VPP recognition process. It also removes temporary instructions no longer applicable, and references to specific VPP affiliates. Minor editorial changes improve readability.

To view the VPP Instruction, visit **www.osha.gov/OshDoc/Directive_pdf/CSP_03-01-003.pdf**.

INDUSTRIAL HYGIENE PROFESSIONAL NEWS (con't)

NIOSH

NIOSH Hearing Loss Simulator Instruction and Training Guide

The NIOSH Hearing Loss Simulator is a software training and communication tool for promoting hearing loss prevention. It allows a user or trainer to demonstrate the effects of noise exposure on hearing without experiencing an actual noise-induced hearing loss. Estimates of the effects of different levels of noise exposure are based on the American National Standard Determination of Occupational Noise Exposure and Estimation of Noise-Induced Hearing Impairment, otherwise known as ANSI S3.44. This standard specifies the predicted hearing loss for noise-exposed populations of individuals based on risk factors that include gender, age, sound levels (in A-weighted decibels or dBA), and years of exposure. Algorithms specified in the standard were derived from empirical studies of populations that had no exposure to loud noise and other populations that had experienced various levels and durations of noise exposure. This manual explains the major objectives that can be addressed with the simulator and training scenarios that can be applied to real-life, real worker scenarios. The majority of this guide explains the simulator's functions in detail. Simulator users are encouraged to read this manual while learning how to run the software. 2008-119 (PDF, 608 KB)